

RUBAN, G.F., kandidat tekhnicheskikh nauk.

Calculation of horizontal anisotropy of the soil when determining seepage flow under hydraulic structures. Gidr.i mel.8 no.8:33-40 Ag '56. (Soil Percolation) (Hydraulic engineering) (MLRA 9:9)

RUBAN, G.S. [Ruban, H.S.]

Business accounting in the production combines of the light industry. Leh. prom. no.4:69-72 O-D '65.

(MIRA 19:1)

RUBAN, G.Ye.

Unusual case of crush syndrome. Sud.-med.ekspert. no.4:47-49  
O-D '65. (MIRA 18:12)

1. Kafedra sudebnoy meditsiny (ispolnyayushchiy obyazannosti  
zaveduyushchego L.M.Moskalenko) Blagoveshchenskogo meditsinskogo  
instituta. Submitted November 24, 1964.

RUBAN, I.

Defects of the equipment. Moloch. prom. 18 no.6:19 '57.  
(MLRA 10:6)

1. Voroshilovgradskiy molochnyy zavod.  
(Dairy industry--Equipment and supplies)

BUZ'KO, A.A.; RUBAN, I.A.; KRAVCHENKO, I.D., veterinarnyy tekhnik.

Biological stimulation and clitorotomy in fattening swine.

Veterinariia 38 no.1:23-24 Ja '61. (MIRA 15:4)

1. Svinootkormochnyy sovkhoz Krymmiyasotresta. 2. Nirektor  
Krymskoy oblastnoy veterinarnoy polikliniki (for Buz'ko).

3. Glavnnyy veterinarnyy vrach Svinootkormochnogo sovkhoza Krym-  
myasotresta (for Ruban). 4. Svinootkormochnyy sovkhoz Krym-  
myasotresta (for Kravchenko).

(Tissue extracts) (Swine) (Castration)

RUBAN, I. A., KRAVCHENKO, I. D., BUZ'KO, A. A.

↳ Main Veterinary Surgeon.

"Practicing Biostimulation and Clitorotomy in Swine During the Fattening Period."

Veterinariya, Vol. 38, No. 1, p. 23, 1961.

RUBAN, I.D.

Constitutional types and the hematological table of bovines.  
Studii cerc biol anim 13 no.1:7-12 '61. (EEAI 10:7)

1. Institutul de zootehnie, Harkov. Catedra de bovine.  
(CATTLE) (BLOOD)

YAKOVLEVA, Z.A.; RUBAN, I.G.; PARSHINA, Z.S.

Drying of goby in a conveyor steam dryer. Trudy Azcherniro  
no.21:36-40 '63. (MIRA 17:8)

RUBAN, I.G. [Ruban, I.H.]

Use of deep-sea water for preserving the fish catch in fisheries.  
Khar. prom. no.1:68-70 Ja-Mr '63. (MIRA 16:4)

1. Azovsko-Chernomorskiy nauchno-issledovatel'skiy institut  
morskogo rybnogo khozyaystva i okeanografii.  
(Fishery products—Preservation)

BURMISTROV, S.I., kand. khim. nauk; RUBAN, I.M., kand. tekhn. nauk

Liquid phase oxidation of bromotoluene. Khim. prom. [Ukr.]  
no.2:37-39 Ap-Je '63. (MIRA 16:8)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

DAL' , V.I.; RUBAN, I.N.

Over-all utilization of the local fuels in the Ukrainian S.S.R.  
Ukr. khim. zhur. 24 no.1:107-110 '58. (MIRA 11:4)

1.Dnepropetrovskiy khimiko-tehnologicheskiy institut im. F.E.  
Dzherzhinskogo.

(Ukraine--Petroleum)  
(Hydrocarbons) (Cracking)

5(2)

SOV/32-24-12-11/45

AUTHORS:

Dal', V. I., Zakupra, V. A., Ruban, I. N.

TITLE:

Determination of Sulfur in Products of Carbon Treatment Using  
the Double Combustion Method (Opredeleniye sery v produkakh  
pererabotki uglya metodom dvoynogo sozhzheniya)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12, pp 1445-1446  
(USSR)

ABSTRACT:

The method of double combustion was suggested by Volynskiy and Chudakova (Ref 1). In the work reported here an iodine solution containing starch was used instead of the soda solution for adsorbing the SO<sub>2</sub> gas. The absorber was also modified (Figure), and among other changes the glass filter was replaced by a perforated plastic lamella. Instead of the gas burner a small electric furnace was used. The product of a catalytic cracking (over 200°), the neutral resinous fraction of semicoking (200-250°), a cracking fraction (200-300°), a Diesel oil, the resinous fraction of a catalytic cracking product (over 200°), concentrates of various aromatic hydrocarbons, and a coal tar were analyzed (Table). It was observed that with a sulfur con-

Card 1/2

SOV/32-24-12-11/45

Determination of Sulfur in Products of Carbon Treatment Using the Double Combustion Method

tent of more than 3% the titration of the SO<sub>2</sub> with iodine is more difficult. When this is the case the weighed sample taken must be smaller and the duration of the analysis must be lengthened. Using the iodine solution the analytic method is simplified and the analysis is carried out more quickly. There are 1 figure, 1 table, and 1 Soviet reference.

ASSOCIATION: Dnepropetrovskiy khimiko-tehnologicheskiy institut  
(Dnepropetrovsk Chemical-Technological Institute)

Card 2/2

RUBAN, I. N.

73-3-23/24

AUTHOR: Dal', V. I. and Ruban, I. N.

TITLE: Complex Utilisation of Local Fuels of the Ukrainian SSR.  
Catalytic Cracking of the Broad Fraction of Lignite Tars  
of the Aleksandrija Deposits. (Kompleksnoye Ispol'zovaniye  
lestnykh topiliv USSR. Kataliticheskiy Kreking Shirokoy  
Fraktsii Smoly Burykh Ugley Aleksandriyskogo Mestorozh-  
deniya)

PERIODICAL: Ukrainskiy Khimicheskiy Zhurnal, 1957, Vol. 23, No. 3,  
pp 411-414 (USSR).

ABSTRACT: Semi-coked tars of the above lignites can be converted  
to light motor fuels (with high yields) without hydro-  
genation. A broad fraction, obtained after distillation  
of the phenols and paraffin, is subjected to catalytic  
cracking by using an alumo-silicate catalyst. The optimum  
cracking temperature was found to be 450° C. The ball-  
shaped catalyst had a 5 mm diameter. The apparatus used  
for cracking is described and shown in figure 1. The  
liquid products were analysed by absorption chromatography  
on silica gel ACK. The "dry" cracking gases were analysed  
by the H<sub>2</sub>SO<sub>4</sub> method, the specific weight was determined  
in a Shifling apparatus. Results of the cracking experi-  
ments are shown in figures 2 and 3. A maximum yield of  
benzene (31.6%) was obtained at 450° C; this yield

Card 1/3

73-3-23/24

Complex Utilisation of Local Fuels of the Ukrainian SSR. Catalytic Cracking of the Broad Fraction of Lignite Tars of the Alexandria Deposits.

decreased when the temperature was increased whereas the output of gas increased on raising the temperature. A maximum yield of kerosene (37%) is obtained at 350°C. At 500°C temperature the decomposition reaches 55%. Benzene obtained by catalytic cracking is very stable. The iodine number of benzene at 450°C was 25.7; Ukrainian lignite contains large quantities of sulphur. Desulphurisation takes place during the cracking process. Comparative analytic data are given for products obtained by direct distillation and by catalytic cracking. Benzene (by distillation) contains 1.8% S, benzene (by catalytic cracking) contains 0.05% S in the fraction up to 170°C and 0.62% S in the fractions between 170 - 240°C. Kerosene contains 1.14% S (when obtained by distillation) and 0.86% S (when obtained by cracking). The cracking products were analysed by chromatography. An increase in the cracking temperature causes a decrease of the paraffin-naphthenic hydrocarbons and an increase in the content of aromatics. The benzenes obtained by catalytic cracking

Card 2/3

Complex Utilisation of Local Fuels of the Ukrainian SSR. Catalytic  
Cracking of the Broad Fraction of Lignite Tars of the Alexandria  
Deposits.

73-3-23/24

have high octane numbers and are of good quality. There  
are 4 figures and 7 Slavic references.

SUBMITTED: October, 5, 1956.

ASSOCIATION: Dnepropetrovsk Chemical Technology Institute imeni  
F. E. Dzerzhinskiy. (Dnepropetrovskiy Khimiko-  
Tekhnologicheskiy Institut im. F. E. Dzerzhinskogo).

AVAILABLE: Library of Congress.

Card 3/3

FOMENKO, O.S.; RUBAN, I.N.

Multiple utilization of coals of the Lvov-Volyn' Basin. Trudy  
DKHTI no.16:85-93 '63. (MIRA 17:2)

RUBAN, I. N.; CHERVINSKIY, K. A.; VARSHAVSKAYA, O. V.

Oxidation of p-chlorotoluene in the liquid phase. Zhur. VKHO 8  
(MIRA 16:4)  
no. 2:227 '63.

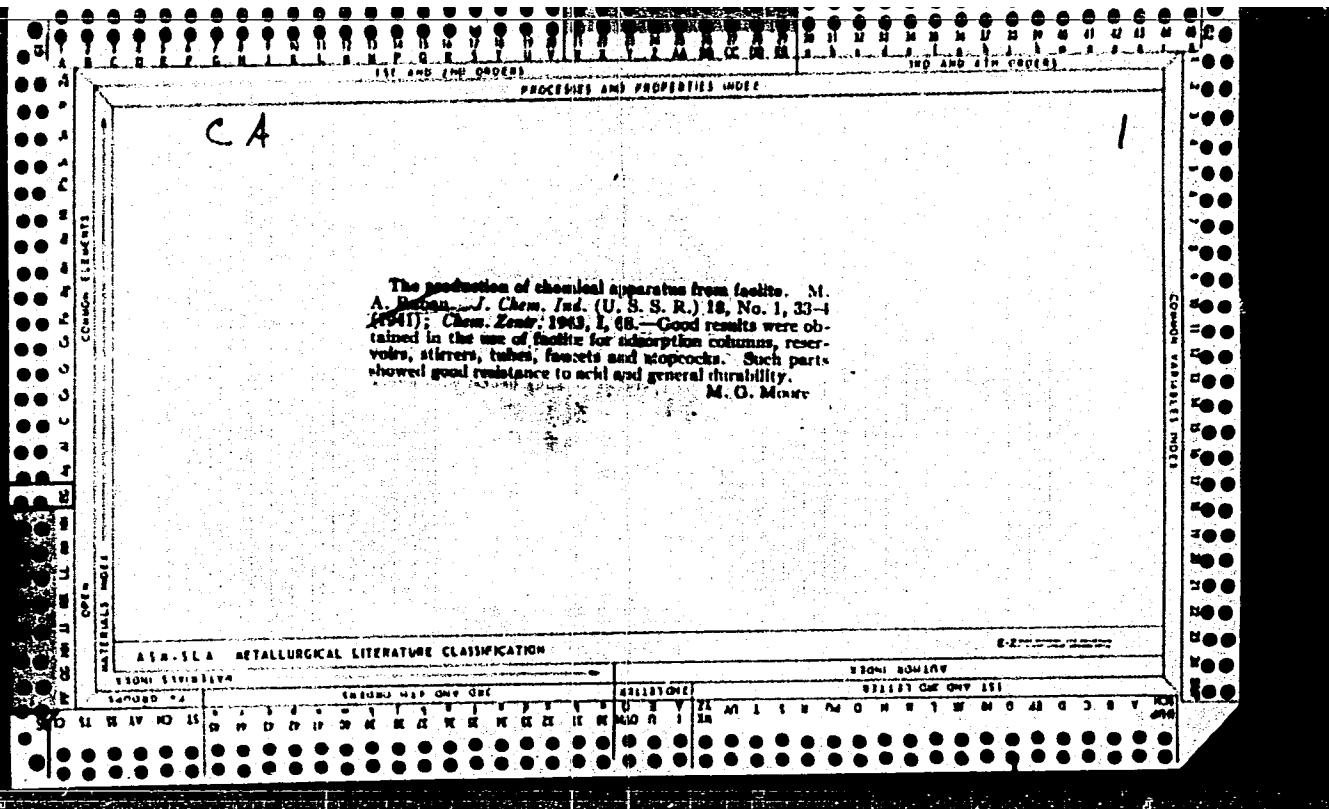
1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

(Toluene) (Oxidation)

HUBAN, I.P.

Effective method of ensuring a good keeping quality of mother beet  
roots. Sakh.prom. 34 no.10:45 0 '60. (MIRA 13:10)

1. Berezinskiy sveklosovkhoz.  
(Sugar beets)



RUBAN, K.I., starshii nauchnyy sotrudnik

Stopping hemorrhage in cavernostomy. Prob.tub.no.4:70-71 J1-Ag  
'55. (MLRA 8:10)

1. Klinicheskoye otdeleniye Uzbekskogo nauchno-issledovatel'skogo  
tuberkuleznogo instituta (dir.-Prof.Sh.A.Alimov)  
(LUNGS--SURGERY) (HEMORRHAGE)

RUBAN, K.I. [deceased]

Surgical treatment of pulmonary tuberculosis under the conditions  
of Uzbekistan (extrapleural pneumolysis, thoracoplasty, cavernotomy).  
Sbor. trud. Uz. nauch-issl. tub. inst. 3:95-102 '57.

(MIRA 14:5)

(UZBEKISTAN—TUBERCULOSIS)

L 02325-67 ENT(m)

ACC NR: AR6022708

SOURCE CODE: UR/0299/66/000/002/M026/M026

AUTHOR: Ruban, K. V.

TITLE: Roentgenomorphological characteristics of transplant accretion  
in homoplasty performed at time of acute radiation sickness symptom  
disappearance

SOURCE: Ref. zh. Biologiya, Part II, 2M171

REF SOURCE: Sb. Vopr. travmatol. i ortopedii. L., 1965, 107-110

TOPIC TAGS: rabbit, tissue transplant, bone, radiation sickness, plastic  
surgery

ABSTRACT: To repair a diaphysis defect of the elbow bone, plastic  
surgery was performed on 11 nonirradiated rabbits in the 1st series  
using a fresh homotransplant 1.2 to 2 cm in length; in the 2nd series  
the plastic surgery was performed on 24 irradiated rabbits using a fresh  
homotransplant; in the 3rd series the plastic surgery was performed on  
12 nonirradiated rabbits using a frozen homotransplant; and, in the 4th  
series the plastic surgery was performed on 22 irradiated rabbits using  
a frozen homotransplant. In irradiated rabbits of the 2nd series the  
reaction of bone fragments and endosteal growth was retarded compared to

Card 1/2

UDC: 577.99

BALAKINA, V.S., prof. (Leningrad P-46, ul. Kuybysheva, d.3, kv.53);  
RUBAN, K.V.

Results of treatment in spinal fractures. Ortop., travm. i protez.  
26 no.1:11-18 Ja '65. (MIRA 18:5)

1. Iz Leningradskogo instituta travmatologii i ortopedii (dir. -  
prof. V.S. Balakina).

BALAKINA, V.S., prof.; RUBAN, K.V., mladshiy nauchnyy sotrudnik

Errors and complications in metal osteosynthesis. Ort. travm.  
i protez. 23 no.10:46-50 O '62. (MIRA 17:10)

1. Iz Leningradskogo instituta travmatologii i ortopedii (dir.-  
prof. V.S. Balakina). Adres avtorov: Leningrad, P-46, park  
Lenina, d.5, Institut travmatologii i ortopedii.

GURKOVSKIY, Ye.V.; RUBAN, L.A.

Polishers made of foamed plastics for polishing glassware.  
Stek. i ker. 22 no.1:38-39 Ja '65. (MIRA 18:7)

L 16338-65	EWT(1)/T/EEC(b)-2	IJP(:)
ACCESSION NR:	AP5000680	S/0181/64/006/012/3715/3717
AUTHORS:	Ruban, M. A.; Deygen, M. F.	B
TITLE: Observation of electron nuclear double resonance of F- centers in KCl		
SOURCE: Fizika tverdogo tela, v. 6, no. 12, 1964, 3715-3717		
TOPIC TAGS: F center, electron nuclear double resonance, potassium compound, optical density		
ABSTRACT: The authors present electron nuclear double resonance spectra (ENDOR) obtained with apparatus developed at the Institut poluprovodnikov AN UkrSSR. The measurements in coordination spheres I and II were made at room temperature, at F center concentrations $6 \times 10^{17} \text{ cm}^{-3}$ . The concentration was estimated by measurements of the optical density. The coloring of the samples was additive. The magnetic field did not have to be modulated to		
Card	1/2	

L 16338-65

ACCESSION NR: AP5000680

5

observe the ENDOR signal, owing to the small relaxation time ( $<10^{-5}$ -- $10^{-6}$  sec) at room temperature for the F-centers in KCl. The authors state that earlier ENDOR measurements were limited by the sensitivity of the apparatus, but give no references to their own apparatus. "The authors thank V. I. Bezruchko for providing the samples and Yu. S. Gromov, P. T. Levkovskiy, and V. M. Mayevskiy for help with constructing the equipment." Orig. art. has: 2 figures.

ASSOCIATION: Institut poluprovodnikov AN UkrSSR, Kiev (Institute of Semiconductors, AN UkrSSR)

SUBMITTED: 07Jul64

ENCL: 00

SUB CODE: SS, NP

NR REF SOV: 000

OTHER: 005

Card 2/2

ACCESSION NR: AT4016327

S/0000/62/000/000/0432/0436

AUTHOR: Bugay, A. A.; Ruban, M. A.; Shatalov, A. A.

TITLE: Electron paramagnetic resonance of some color centers in alkali halide crystals

SOURCE: Vses. soveshch. po fiz. shchelochnogaloidn. kristallov. 2d, Riga, 1961.  
Trudy\*. Fiz. shchelochnogaloidn. kristallov (Physics of alkali halide crystals). Riga,  
1962, 432-436TOPIC TAGS: alkali halide, alkali halide crystal, color center, electron paramagnetic  
resonance, alkali halide color center, F center, super fine cleavageABSTRACT: There is a generally accepted view that an  $F_2$ -center consists of two adjacent halogen vacancies with two captured electrons. If true, this should result in the absence of electron paramagnetic resonance. In an effort to verify this view, tests were performed with KC1 crystals pre-exposed to light at 270-300C to develop  $F_2$ -centers. Spectrometric observations at a frequency modulation of 425 kcps with the use of a  $N_{10^2}$  resonator revealed no resonance in the crystals, thus corroborating the above concept, while control KC1 samples containing F-centers gave a strong positive response. Examination of NaCl crystals after thermal treatment, which is known to cause coagulation and produce colloidal alkali metals, revealed an electron paramagnetic resonance

Card 1/2

ACCESSION NR: AT4016327

line very close to that of metallic sodium. The superfine structure of the electron paramagnetic resonance line of the KCl F-centers could be successfully observed at 20.4K; photographs of this line are provided. The superfine structure was found to become completely blurred at 77K. The constant of superfine cleavage and the halflength of the superfine cleavage and the halflength of the superfine structure line were measured. "In conclusion, the authors express thanks to M. F. Deygen and A. B. Roytsin for evaluating the results, to V. M. Bezruchko for help in preparing the crystals and to V. M. Mayevskiy for help with the low-temperature measurements." Orig. art. has: 2 photographs.

ASSOCIATION: Klyevskiy gosudarstvenny\*y universitet im. T. G. Shevchenko (Kiev State University)

SUBMITTED: 00

DATE ACQ: 06Mar64

ENCL: 00

SUB CODE: IC, OP

NO REF SOV: 006

OTHER: 007

2/2

Card

RUBAN, M.A.; DEYGEN, M.F.

Observation of double electron-nuclear resonance in F-centers  
in KCl. Fiz. tver. tela 6 no.12:3715-3717 D '64  
(MIRA 18:2)

1. Institut poluprovodnikov AN UkrSSR, Kiyev.

L 24570-66 EWT(1) IJP(c) WW/GG

ACC NR: AP6009669

SOURCE CODE: UR/0181/66/008/003/0826/0831

AUTHORS: Deygen, M. F.; Ruban, M. A.; Gromovoy, Yu. S.

55  
53

ORG: Institute of Semiconductors AN UkrSSR, Kiev (Institut  
poluprovodnikov AN UkrSSR)

B

TITLE: Electron-nuclear double resonance of F centers in KCl at  
room temperature (first and second coordination spheres)

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 826-831

TOPIC TAGS: color center, nuclear resonance, electron paramagnetic  
resonance, angular distribution, potassium chloride, hyperfine  
structure

ABSTRACT: The purpose of the investigation was a detailed study of  
the angular dependence of the frequencies of the electron-nuclear  
double resonance (ENDOR) of F centers of KCl at room temperature,  
the determination of more accurate values of the hyperfine constants,  
and the determination of the constants that describe the quadrupole  
interaction of a localized electron with nuclei of the second

Card

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I 24570-66

ACC NR: AP6009669

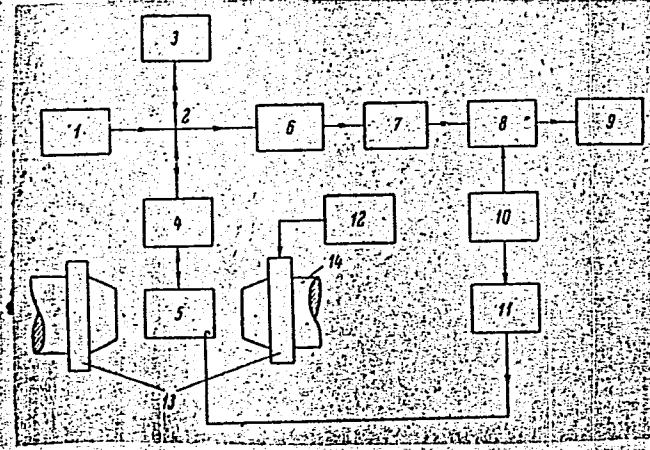


Fig. 1. Simplified block diagram of ENDOR setup. 1 -- Microwave generator, 2 -- twin-T bridge, 3 -- compensating arm, 4 -- adjustable coupling, 5 -- resonator with sample, 6 -- superheterodyne receiver, 7 -- selective low frequency amplifier, 8 -- phase sensitive detector, 9 -- automatic recorder, 10 -- low frequency modulator, 11 -- generator for supplementary rf signal, 12 -- current stabilizer, 13 -- electromagnet coils, 14 -- electromagnet.

Card

2/3

I 24570-66

ACC NR: AP6009669

2

coordination sphere. The ENDOR spectrometer used registered stationary signals (Fig. 1) and its main component was a superheterodyne EPR spectrometer operating in the 3-cm band. The measurements were made at room temperature in a magnetic field uniform to within  $10^{-5}$  G/cm, with a current stabilized to  $10^{-6}$ . The sensitivity of the EPR spectrometer to a signal from standard DPPH was of the order of  $10^{12}$  at a microwave power of 1 -- 2 mW and a time constant of 4 seconds. The measurements were made with additively colored KCl crystals with F-center concentration  $10^{17}$  --  $10^{18}$  cm<sup>-3</sup>. The experiments yielded the resolution of the quadrupole triplets in the first and second coordination sphere in different external static magnetic fields. The contact and the dipole-dipole constants of the hyperfine interaction and the constants of the quadrupole interaction are determined and tabulated. The results agree with those obtained by others with fair accuracy. The authors thank A. A. Shatalov and V. V. Udod for supplying the samples. Orig. art. has: 5 figures, 5 formulas, and 3 tables.

SUB CODE: 20/ SUBM DATE: 28Jul65/ ORIG REF: 003/ OTH REF: 001

Card

3/3 BK

LYANDA, M.N.; RUBAN, M.G.

Grabs for PG-1 glazing machines. Stek. i ker. 17 no.12:39-40.D '60.  
(MIRA 13:11)  
(Glazing--Equipment and supplies)

RUBAN, K.I., kandidat meditsinskikh nauk

Physicochemical and biochemical blood changes in endarteritis obliterans. Vrach.dalo no.2:185-186 P '56. (MIRA 9.7)

1. Gospital'naya khirurgicheskaya klinika lechebnogo fakul'teta  
Tashkentskogo meditsinskogo instituta  
(BLOOD--EXAMINATION) (ARTERIES--DISEASES)

Country : USSR  
Category : Soil Science. Biology of Soils. J  
Abs Jour : RZhBiol., No 6, 1959, No 24632  
Author : Rubenchik, L. I.  
Inst :  
Title : Relations between Microorganisms and the  
Higher Plants.  
Orig Pub : Mikrobiol. zh., 1957, 19, No. 3, 14-21  
  
Abstract : No abstract.  
  
Card : 1/1

BUGAY, A.A.; RUBAN, M.A.

Spectrometer for studying electron paramagnetic resonance in solids  
at low temperatures. Zav.lab. 29 no.11:1376-1379 '63.

(MIRA 16:12)

1. Institut poluprovodnikov AN UkrSSR.

J 17329-63

EPP(c)/EWT(1)/BDS/EEG(b)-2

AFFTC/ASD/ESD-3 Pr-4 GG

ACCESSION NR: AP3004899

S/0120/63/000/004/0103/0106

AUTHOR: Ruban, M. A.64  
62

TITLE: Single-band SHF modulator as a local oscillator in an electron-paramagnetic-resonance spectrometer

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1963, 103-106

TOPIC TAGS: SHF modulator, local oscillator, electron paramagnetic resonance, spectrometer

ABSTRACT: A crystal-diode modulator is described in which, by combined amplitude-and-phase modulation, a single-band signal power of about 0.5 mw is developed, with 5-7 mw derived in the modulator channel. The modulator was tested with a simulator of an electron-paramagnetic-resonance spectrometer, in a reflex-type circuit, with a circulator and matching transformer. The signal reflected from the resonator was applied to a balanced mixer designed with a

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L 17329-63

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ACCESSION NR: AP3004899

slot-type bridge and D405A diodes. The carrier and second side band are suppressed by 50 db or better; higher-harmonic side bands, by 30 db or better. The modulator is intended for use in investigating double electron-nuclear resonance. "In conclusion, I feel it necessary to thank all members of the Laboratory for their interest in this work, and V. V. Zotov for his help with the experimental work." Orig. art. has: 3 figures and 1 formula.

ASSOCIATION: Institut poluprovodnikov AN UkrSSR (Institute of Semiconductors, AN UkrSSR)

SUBMITTED: 07Aug62

DATE ACQ: 28Aug63

ENCL: 00

SUB CODE: NS

NO REF SOV: 002

OTHER: 006

Card 2/2

LYANDA, M.N.; RUBAN, N.G.

Semiautomatic machine for glazing flat products. Stek. i ker.  
17 no.10:36-37 '60. (MIRA 13:10)  
(Glazing--Equipment and supplies)

LYANDA, M.N.; RUBAN, M.G.

Semiautomatic airbrush for painting products and automatic dosimeter for weighing gypsum. Stek. i ker. 17 no.9:41-43  
S '60. (MIRA 13:9)

(Airbrush art) (Gypsum)

RUBAH, M.W., kapitan 2-go ranga

Imperialists of the U. S. A., the worst enemies of peace and  
socialism. Mor. stor. 48 no.9:3-9 S '65.

(MIRA 18:8)

AGALETSKIY, F.N., kand.tekhn.nauk; RUBAN, N.M., tekhnik

Reducing iron from ores in a semisuspended state. Trudy Ukr.  
nauch.-issl.inst.met. no.5:25-35 '59. (MIRA 13:1)  
(Iron--Metallurgy) (Fluidization)

RUBAN, N.M.; PONOMAREV, V.D.

Vapor pressure of vanadium oxychloride at temperatures of  
58 - 124°C. Trudy Inst. met. i obog. AN Kazakh. SSR  
5:34-40 '62. (MIRA 15:11)

(Vapor pressure) (Vanadium—Metallurgy)

PONOMAREV, V.D.; RUBAN, N.N.

Solubility of aluminum hydroxide in solutions of caustic soda and sodium sulfide. Izv.AN Kazakh.SSR no.118:16-24 '53. (MLRA 6:10)  
(Aluminum hydroxide)

PONOMAREV, V.D.; RUBAN, N.N.

Dissolution peptization and the surface energy on the boundary: liquid - solid.  
Izv.AN Kazakh.SSR no.118:25-31 '53. (MLRA 6:10)  
(Colloids)

RUBAN, N. N.

27  
Density and viscosity of sulfide and sulfide-aluminate  
solutions. V. D. Ponomarev and N. N. Ruban. *Izvest.  
Akad. Nauk Kazakh. SSR, Ser. Tekhnich.-Tekhn., Met.,  
Stroitel. i Stroimaterial.*, 1957, No. 1, 22-33. The d. and the  
viscosity  $\eta$  of  $\text{Na}_2\text{S}$  and  $\text{Na}_2\text{S} + \text{aluminate}$  solns. were detd.  
in the 25-75° range. The d. of the mixed soln. was some-  
what higher than that of  $\text{Na}_2\text{S}$  solns. and the difference in-  
creased with the concn. of  $\text{Na}_2\text{S}$ . The temp. coeff. of d.  
of the mixed soln. increased with the concn. and that of  $\eta$   
decreased. The  $\log \eta$  vs. the reciprocal of the temp. was  
not a linear func... I. Bencowitz

27  
P  
A=4  
11

MT

KUBAN, N.N.

PONOMAREV, V.D.; RUBAN, N.N.

Carbonation of sulfide and aluminate solutions. Izv.AN Kazakh.SSR.  
Ser.gor.dela, met., stroi.i stroimat. no.1:48-56 '57.

(MLRA 10:5)

(Sulfides) (Aluminates) (Carbon dioxide)

18(5,6,3)

PHASE I BOOK EXPLOITATION SOV/2094

Akademiya nauk Kazakhskoy SSR. Institut metallurgii i obogashcheniya

Trudy, t. 1 (Transactions of the Institute of Metallurgy and Ore Dressing, Kazakh SSR Academy of Sciences, Vol 1)  
Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1959. 159 p. 1,225 copies printed.

Ed.: Yu. N. Kuznetsov; Tech. Ed.: Z.P. Rorokina;  
Editorial Board: V.D. Ponomarev (Resp. Ed.), B.N. Lebedev,  
A.N. Grigorovich, L.P. Ni, R.A. Isokova, I.R. Polyvyannyy  
(Resp. Secretary), and Ye. I. Ponomareva.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This is a collection of articles dealing with various aspects of process metallurgy, principally nonferrous, and with related matters such as treatment of ore concentrates,

Card 1/5

Transactions of the Institute (Cont.)

SOV/2094

properties of slags, etc. Topics discussed include precipitation of copper from slags, extraction of arsenic from speiss, recovery of rare metals from smelting dust, electrolytic precipitation of lead and zinc, and drying of lead-zinc concentrates. Three articles are concerned with the metal, rhenium. The articles are accompanied by Soviet and non-Soviet references.

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Transactions of the Institute (Cont.)	SOV/2094
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RUBAN, N.N.; POMOMAREV, V.D.

Iron oxide reduction in sulfuric acid solutions by sulfur  
dioxide and hydrogen sulfide. Trudy Inst.met. i obogoshch.  
1:31-36 '59. (MIRA 12:5)  
(Reduction, Chemical) (Iron oxides) (Sulfuric acid)

S/137/61/000/012/032/1<sup>49</sup>  
A006/A101

AUTHOR: Ruban, N.N.

TITLE: On studies concerning theoretical problems of titanium production  
(Review)

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 16, abstract  
12G115 ("Tr. In-ta metallurgii i obogashcheniya AN KazSSR" 1960,  
v. 3, 154 - 158)

TEXT: The studies are being conducted in the following directions: a) chlorination of Ti-containing granulated raw material in a fluidized bed for the purpose of obtaining  $TiCl_4$ ; b) improvement of the  $TiCl_4$  refining process. The method of saturation at 70, 90, 105, 120 and 127°C was employed to investigate the solubility of  $FeCl_3$  and  $AlCl_3$  in  $TiCl_4$ . In connection with the possibility of using  $K_2TiF_6$  as an electrolyte during the electrolytic production of this compound were studied. For investigation of Ti, the physical and chemical properties of this compound were studied. For investigation of the electrolytical production of Ti an eutectic mixture, was employed as an electrolyte. With admixtures of  $TiO_2$  soluble in the mixture,

Card 2/

Card 1/2

PONOMAREV, V.D., otv.red.; NI, L.P., red.; RUBAN, N.N., red.;  
SAZHIN, V.S., red.; SOLENKO, T.V., red.; ZHUKOVA, N.D., red.;  
ROROKINA, Z.P., tekhn.red.

[Chemistry and technology of alumina; transactions] Khimiia i  
tekhnologiiia glinozema; trudy. Alma-Ata, Izd-vo Akad.nauk  
Kazakhskoi SSR, 1961. 162 p. (MIRA 15:5)

1. Vsesoyuznoye soveshchaniye po khimii i tekhnologii glinozema,  
Alma-Ata, 1959. 2. Institut metallurgii i obogashcheniya AN Kazakh-  
skoy SSR(for Ni). 3. Kazakhskiy politekhnicheskiy institut (for  
Ponomarev, Sazhin).

(Alumina)

8/137/61/000/012/034/149  
A006/A101

AUTHORS: Ruban, N.N.; Ponomarev, V.D., Vinogradova, K.A.

TITLE: On the solubility of aluminum chloride in titanium tetrachloride

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 17, abstract  
120123 (Izv. AN KazSSR, Ser. metallurgii, obogashcheniya i ogneupo-  
rov, 1961, no. 1 (10), 33 - 40, Kaz. summary)

TEXT: The authors studied solubility of  $\text{AlCl}_3$  in  $\text{TiCl}_4$  at 70, 90, 105,  
120 and  $127^{\circ}\text{C}$ . It was established that at a rise of the temperature from 70 to  
 $127^{\circ}\text{C}$ ,  $\text{AlCl}_3$  solubility in 100 g  $\text{TiCl}_4$  increased from 0.24 to 7.24 g. The depend-  
ence of the logarithm of  $\text{AlCl}_3$  concentration in  $\text{TiCl}_4$  (in mole parts) on the in-  
verse value of absolute temperature, is expressed by a straight line. ✓

G. Svodtseva

[Abstracter's note: Complete translation]

Card 1/1

RUBAN, N.N.; PONOMAREV, V.D.

Determining the pressure of titanium tetrachloride vapors. Trudy  
Inst. met. i obogashch. AN Kazakh. SSR 4:19-27 '62. (MIRA 15:8)  
(Titanium chloride) (Vapor pressure)

RUBAN, N.N.; PONOMAREV, V.D.

Treatment of sericites for alumina by sulfuric acid methods.  
Trudy Inst. met. i obogashch. AN Kazakh. SSR 4:74-81 '62.  
(MIRA 15:8)

(Sericite) (Alumina)

VINOGRADOVA, K.A.; RUBAN, N.N.; PONOMAREV, V.D.

Solubility of aluminum chloride in titanium tetrachloride in  
presence of vanadium oxychloride. Izv. AN Kazakh. SSR. Ser.  
tekhn. i khim. nauk no.2:75-82 '63. (MIRA 17:2)

RUBAN, N.N.; PONOMAREV, V.D.; VINOGRADOVA, K.A.

Solubility of iron and aluminum chlorides in titanium tetrachloride.

Trudy Inst. met. i obog. AN Kazakh. SSR 6:22-29 '63.

(MIRA 16:10)

RUBAN, N.N.; VINOGRADOVA, K.A.; TSAYCH, S.M.; AVERISYAN, Yu.A.

Determining small quantities of aluminum in systems containing  
aluminum and vanadium chlorides. Trudy Inst. met. i obog. AN  
Kazakh. SSR 12:120-124 '65.

(MTRA 18:10)

KOPYLOVA, Ye.A.; RUBAN, N.N.; VINOGRADOVA, K.A.

The hydrolysis of vanadium oxychloride. Report no.1. Trudy Inst.  
met. i obog. AN Kazakh. SSR 12:145-150 '65.

(MIRA 18:10)

RUBAN, N.O., zasluzhenny artist RSFSR

Play badminton. Zdorov'e 8 no.8:25 Ag '62.

(MIRA 15:8)

1. Predsedatel' Federatsii badmintona SSSR.  
(BADMINTON (GAME))

KAGANIKO, V.E.; RUBAN, I.S.

Elements of the theory and design of an inductosyn. Elektriches'tvo  
no.9:30-40 S '64. (MIRA 17:10)

I. Institut avtomatiki Gosplan'a UkrSSR.

RUBAN, P.I. (Dneprodzerzhinsk); KRASIL'NIKOV, K.V. (Dneprodzerzhinsk)

Approximation by trigonometric polynomials of functions of two  
variables satisfying Lipshits' condition. Izv. vys. ucheb.  
zav.; mat. no.3:135-136 '63. (MIRA 16:4)

(Functions, Periodic) (Polynomials)

RUBAN, P.I. (Dneprodzerzhinsk); KRASIL'NIKOV, K.V. (Dneprodzerzhinsk)

Approximation by trigonometric polynomials of functions of two  
variables satisfying Lipshits' condition. Izv. vys. ucheb.  
zav.; mat. no. 3:135-136 '63. (MIRA 16:4)

(Functions, Periodic) (Polynomials)

RUBAN, P. I.

Ruban, P. I. -- "Determination by the Method of Mathematical Analysis of the Volume and Static Moments of Liquid Metal When a Pouring Ladle is Overturned." Acad Sci Ukrainian SSR, Inst of Ferrous Metallurgy, Dnepropetrovsk, 1955 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnata Letopis', No. 23, Moscow, Jun 55, pp 87-104

RUBAN, P.I. (Dneprozerzhinsk); KRASIL'NIKOV, K.V. (Dneprozerzhinsk)

Use of trigonometric polynomials in the approximation of  
even functions satisfying Lipshits' condition. Izv. vys.  
ucheb. zav.; mat. no.2:136-138 '64. (MIRA 17:8)

RUBAN, P.I.; KRASIL'NIKOV, K.V.

One of the methods for the approximation of functions satisfying Lipschitz's conditions by trigonometric polynomials. Izv.vys. ucheb.zav.; mat. no.1:194-107 '60. (MIRA 13:6)

1. Dneprodzerzhinskiy vecherniy metallurgicheskiy institut imeni Arsenicheva.  
(Functions, Periodic)

RUBAN, Pavel Ivanovich; GARMASH, Yevdokiya Yevdokimovna; TAL'SKIY, D.A.,  
red.; MURASHOVA, V.A., tekhn. red.

[Textbook for the solution of problems in analytic geometry]  
Rukovodstvo k resheniu zadach po analiticheskoi geometrii.  
Moskva, Vysshiaia shkola, 1963. 313 p. (MIRA 16:8)  
(Geometry, Analytic)

86233  
S/032/60/026/008/031/046/XX  
B020/B052

18.8200

Ruban, P. M.

AUTHOR:

TITLE:

Experimental Investigation of Internal Energy Dissipation  
With Torsion by the Method of Hysteresis Loop

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 8, pp. 987-990

TEXT: The coefficient of internal friction is a fundamental quantity characterizing the capability of the material of causing an irreversible form of energy dissipation during cyclic deformation. The experimental determination of the internal energy dissipation is carried out not by determining the coefficient of internal friction, but by the method of hysteresis loop. For the investigation a device of the type Lehr-Schenk (Ref. 3) was used which directly photographed the diagram of dynamic deformation in the coordinates "torsional moment - torsion angle of the sample" onto the screen. Tubular samples were used for the tests (Fig. 1), which were produced from high-quality steels of the types 35, 45, and 40X (40Kh). It took 10 to 15 seconds to take the pictures of the diagrams

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Experimental Investigation of Internal Energy S/032/60/026/008/031/046/XX  
Dissipation With Torsion by the Method B020/B052  
of Hysteresis Loop

of dynamic deformation. Fig. 2 gives the diagrams of the dynamic deformation of steel type 35, which correspond to the tension amplitudes of 11.1, 13.6, and 16.6 kg/mm<sup>2</sup>. Fig. 3 proves the existence of a tension level at which the diagram of dynamic deformation takes the shape of a straight line with a small loop at each end. For tensions below or above this level, the diagrams of dynamic deformation have the shape of hysteresis loops differing considerably in their shape. The tensions at which the diagrams of dynamic deformation almost have the shape of straight lines, are those of the steels of the types 35, 45, and 40Kh of 13.6, 16.0, and 28 kg/mm<sup>2</sup>. A comparison of these quantities with those given by the table, shows that they lie within the interval of the fatigue limits of the materials. The change of the coefficient  $\Psi$  of the internal friction in dependence on the tension amplitude  $\tau$  of the steels of the types 35, 45, and 40Kh is shown in Fig. 3. The function  $\Psi = f(\tau)$  has no monotonic course, but a clear minimum. The intensities of the changes of the internal friction coefficients  $d\Psi/d\tau$  differ for the three above materials with different tensions. In recent years, the investigations (Refs. 6, 7) also showed that the dependence of the internal friction on the tension

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Experimental Investigation of Internal Energy Dissipation With Torsion by the Method of Hysteresis Loop

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B020/B052

was not monotonic. This is in accordance with the results of this paper. A note of the editor mentions the results by K. T. Shatalovkin which are different. There are 3 figures, 1 table, and 7 references: 5 Soviet, 1 US, and 1 German.

ASSOCIATION: Institut liteynogo proizvodstva Akademii nauk USSR  
(Institute of Foundry Products of the Academy of Sciences UkrSSR)

Card 3/3

GRAF, M.E.; RUBAN, P.M.

Determining the dynamic error in fatigue bending tests. Zav.  
lab. 24 no.11:1403-1406 '58. (MIRA 11:12)

1. Institut mashinovedeniya AN USSR.  
(Fatigue testing machines)

18(3) 25(2)

AUTHORS:

Garf, M. E., Ruban, P. M.

SOV/32-24-11-26/37

TITLE:

The Determination of Dynamic Errors in Tests of Fatigue  
in Bending  
(Opredeleniye dinamicheskoy pogreshnosti ispytaniy na  
ustalost' pri izgibe)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 11, pp 1403-1406  
(USSR)

ABSTRACT:

The equation according to Lagrange can be applied to the solution of problems concerning oscillations in compressive-tensile-strength or torsion-testing machines. A sketch of the dynamic system of a testing machine of this kind is given. The dynamic error can be computed with the aid of the equation

$$\Delta = \frac{M_{st} - M_{dyn}}{M_{dyn}} \cdot 100 \% \quad (M_{st} \text{ and } M_{dyn} \text{ being the bending}$$

moment with static and dynamic loads). Further calculations lead to the discovery that the value of the dynamic error does not depend on the nature or mass of the load. This was exemplified in the testing of crankshafts of tractor diesel engines. A dynamic error of 24.8 % was computed, whereas

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The Determination of Dynamic Errors in Tests of  
Fatigue in Bending

SOV/32-24-11-26/37

actual measurements yielded a value of 23 %. Moreover, it was observed that an extremely intensive increase of the dynamic error is brought about when the clamping holder which is closer to the load is enlarged. As a result of these observations the mass of the load may be selected according to the optimum working conditions of the machine, as this mass has no effect upon the dynamic error. In compressive-tensile-strength or torsion-testing machines the dynamic error is only influenced by the rigidity of the dynamometer and the mass of the clamping holder attached to it. In bending testing machines, however, the dynamic error depends on the rigidity of all parts of the system and on all compact masses (except that of the load). The equations obtained permit a sufficiently accurate determination of the dynamic error and therefore also of the optimum sizes of the testing machine. There are 3 figures and 2 references, 1 of which is Soviet.

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The Determination of Dynamic Errors in Tests of  
Fatigue in Bending

SOV/32-24-11-26/37

ASSOCIATION: Institut mashinovedeniya Akademii nauk USSR  
(Institute of Mechanical Engineering of the Academy of Sciences  
UkrSSR)

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Ruban, P.M.

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